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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,298	01/25/2005	Cornelius Antonius Hezemans	NL 020683	1496

24737 7590 08/20/2008

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EXAMINER	
NGUYEN, LINH THI	
ART UNIT	PAPER NUMBER
2627	
MAIL DATE	DELIVERY MODE
08/20/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/522,298	HEZEMANS, CORNELIUS ANTONIUS	
	Examiner	Art Unit	
	LINH T. NGUYEN	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 May 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Semba (US Patent Number 5317550).

In regards to claim 1 Semba discloses a method of controlling a disc drive apparatus of a type comprising: a sledge radially displaceable with respect to an apparatus frame (Fig. 1, element 26 coarse actuator); and a platform radially displaceable with respect to said sledge (Column 4, lines 15-17); the method of controlling comprising the acts of detecting at least one of a substantial deceleration or acceleration and stop of the sledge when moving radially; by detecting a radial displacement of said platform with respect to said sledge (Column 4, lines 25-40), and controlling the sledge based upon the detecting acts (Column 6, lines 20-37).

In regards to claim 3, Semba discloses a method according to claim 1, comprising an act of detecting an optical read signal and deriving from the optical read signal an X-displacement signal (Column 4, lines 25-30).

In regards to claim 7, Semba discloses method for initializing a radial position of an optical lens in a start-up phase of a disc drive apparatus, the method comprising of comprising acts of: exerting a force on said sledge; detecting at least one of a substantial deceleration or stop of the sledge using a method according to claim 1 (Column 6, lines 59-69); and stopping said force (Fig. 3, deceleration does not exert a force) as soon as a substantial radial displacement of said platform with respect to said sledge is detected (Fig. 3 as sledge is detected by position 82 or 80 it accelerate and decelerate depending on the detection).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 4-6, 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Semba in view of Chou (US Patent Number 6229773).

In regards to claim 2, Semba discloses everything claimed in claim 1 above. However, does not disclose a method according to claim 1, wherein the method of detecting comprises step act of detecting a back-EMF in an electromagnetic device in an actuator for displacing said platform with respect to said sledge, the method comprising the step of detecting a back-EMF in said electromagnetic device.

In the same field of endeavor, Chou discloses a method, wherein the method of

detecting comprises step act of detecting a back-EMF in an electromagnetic device in an actuator for displacing said platform with respect to said sledge (Fig. 9), the method comprising the step of detecting a back-EMF in said electromagnetic device (Fig. 10-11). At the time of the invention it would have been obvious of a person of ordinary skill in the art to modify the method of Semba to have a step of detecting a back-EMF as suggested by Chou. The motivation for doing so would have been to reduce the fluctuation of the tracking coil (Column 10, lines 17-18).

In regards to claims 4 and 6, Semba discloses a method according to claims 1 and 5, wherein detecting at least one of a substantial deceleration or acceleration or stop of the sledge occurs when a detected radial displacement of said platform with respect to said sledge (Fig. 1). However, Semba does not but Chou discloses a method wherein the sledge exceeds a predetermined decision threshold (Fig. 7C and Column 7, lines 63-67). The motivation is the same as claim 2 above.

In regards to claim 5, Semba does not but Chou discloses a method, comprising an act of detecting an actuator control signal activated to counteract the radial displacement of said platform with respect to said sledge (Column 6, lines 54-58). The motivation is the same as claim 2 above.

In regards to claim 8, Semba discloses a disc drive apparatus, comprising: radially displaceable scan means, comprising: a sledge radially displaceable with respect to an

apparatus frame (Fig. 1, coarse actuator 26); a platform radially displaceable with respect to said sledge (Fig. 1, fine actuator element 28). However, Semba does not disclose the detection of a sledge stop detection means for detecting that the moving sledge coming to a stop; said sledge stop detection means comprising radial displacement detection means for detecting a radial displacement of said platform with respect to said sledge.

In the same field of endeavor, Chou discloses the detection of a sledge stop detection means (Fig. 7B as the force is zero) for detecting that the moving sledge coming to a stop (Fig. 7A-B); said sledge stop detection means comprising radial displacement detection means for detecting a radial displacement of said platform with respect to said sledge (Column 7, lines 55-63). At time of the invention it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Semba to have a sledge stop detection mean as suggested by Chou. The motivation for doing so would have been to reduce the fluctuation of the tracking coil (Column 10, lines 17-18).

In regards to claim 10, Semba discloses a apparatus according to claim 8, comprising: an optical system for scanning a disc, the optical system defining an optical path of which at least a part is substantially fixed with respect to said sledge and comprising an optical element which is fixed with respect to said platform; wherein said the radial displacement detection means are designed to detect an optical read signal and deriving from the optical read signal an X-displacement signal (Column 4, lines 25-30).

In regards to claim 9, rejected for the same reasons as claim 2 above.

In regards to claim 11, rejected for the same reasons as claim 4 above.

In regards to claim 12, rejected for the same reasons as claim 5 above.

In regards to claim 13, rejected for the same reasons as claim 6 above.

In regards to claim 14, Semba does not but Chou discloses an apparatus according to claim 8, further comprising: a controllable sledge actuator (Fig. 6A, element 640) configured to move said sledge radially with respect to said apparatus frame (Fig. 6B); a control unit configured to control said sledge actuator (Fig. 6A, element 640); said control unit configured to respond to said radial displacement detection means to switch off (Fig. 7B) said sledge actuator when said radial displacement detection means indicated that said sledge has come to a stop (Fig. 7B and column 7, lines 61-63). The motivation is the same as claim 8 above.

In regards to claim 15, Semba does not but Chou discloses an apparatus, wherein a displacement range (Fig. 6B) of said sledge with respect to said apparatus frame is restricted by at least one end stop (Fig. 6B end of the sledge); wherein said control unit is designed, in an initializing phase, to energize (exerting force) said sledge actuator such as to move said sledge towards said end stop (Fig. 7B); and wherein said control unit is configured to switch off (Fig. 7B, force is zero at position B) said actuator as soon as said sledge has reached said end stop (Fig. 7A-B). The motivation is the same as claim 8 above.

Response to Arguments

Applicant's arguments filed 5/12/08 have been fully considered but they are not persuasive. In regards to claim 1, applicant argues that Semba does not disclose "detecting a radial displacement of said platform with respect to said sledge." However, Semba discloses the method of detecting a radial displacement of said platform with respect to said sledge (Column 4, lines 25-32; the displacement of the objective lens 20 (platform) relative to the coarse actuator 26 (sledge) is detected by a position sensor 30 which convert the signal to electrical signal 82 and base on the detected signals 82, 94 and 84 added together to control the coarse actuator and the fine actuator (Column 6, lines 25-37)). Applicant mention about the drive signal 90 is converted into signal 92 by the integrator 40, which indicate the reference velocity of beam 22 relative to optical disk 10. However, this signal 90 is irrelevant to the claim limitations. Semba detects a TES 80 inputted into track counter 34 to converted into a driving signal 90 to indicate the reference velocity signal 92 of the beam spot further is added to the velocity signal of the beam spot 86 and the velocity difference signal 94 is added to the relative position signal 82 (which is the displacement of objective lens relative to the coarse actuator) and relative velocity signal 84 to output a drive signal to control the coarse actuator to accelerate or decelerate, therefore, control the coarse actuator (sledge) based upon the detected act (Column 5, lines 62-67 and Column 6, lines 1-37). Therefore 1-15 is not patentable in view of Semba and Chou.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LINH T. NGUYEN whose telephone number is (571)272-5513. The examiner can normally be reached on 10:00am-7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TAN Xuan DINH/
Primary Examiner, Art Unit 2627
August 17, 2008

LN
August 11, 2008